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Application No. 09/855,142

Reply to Office Action

*AMENDMENTS TO THE CLAIMS*

1. (Previously Presented). A data packet for holding an information request and corresponding response data together, the data packet comprising a plurality of layers, the layers including a routing layer and a client request layer respectively containing routing information and the information request, the data packet being transmittable over a distributed network including a plurality of processing nodes, wherein the data packet is interpreted by a first of said processing nodes to determine whether the first of said processing nodes is able to process the information request and generate at least part of the response data, and wherein the data packet is expanded by the first of the processing nodes to include a further layer containing routing information relating to a next stage in the processing of the data packet to be performed at a second of said processing nodes whilst leaving the plurality of layers intact and undisturbed, the first of said processing nodes determining the routing information contained in the further layer in dependence upon only the data packet content.

2. (Previously Presented). A packet according to claim 1, wherein the layers further include at least one layer selected from a group containing client device information, user identification information, and application identification information.

3 - 5. (Cancelled).

6. (Previously Presented). A method of responding to an information request from a client device, the method including the steps of wrapping the information request in at least one layer to produce a request packet, transmitting the request packet over a distributed network comprising first and second processing nodes, and generating a response packet for transmission back to the client device via the distributed network for responding to the information request, wherein the first processing node performs analysis of the information request stored on the request packet to determine whether the first processing node is able to process the information request and generate at least part of the response data packet; and wherein the first processing node adds a routing layer to the request packet containing routing information relating to a next stage in processing of the request packet to be performed by the second processing node, the first processing node determining the routing information

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contained in the routing layer in dependence upon only the data packet content, and the second processing node processing the request packet whilst leaving the at least one layer of the request packet intact and undisturbed; and wherein the step of generating the response packet generates the response packet to include said information request.

7. (Previously Presented). A distributed network including a data packet for holding an information request and corresponding response data together, said data packet comprising a plurality of layers, the layers including a routing layer and a client request layer respectively containing routing information and the information request, a plurality of processing nodes each configured to interpret at least a respective one of the layers of said data packet and to add and/or remove layers before passing the data packet to another one of the nodes, the data packet being adapted to be transmitted over the distributed network, the data packet being interpreted by a first of said processing nodes of said network to determine whether the first of said processing nodes is able to process the information request and generate at least part of the response data, and wherein the data packet is expanded to include a further layer containing routing information relating to a next stage in the processing of the data packet to be performed at a second of the processing nodes of said network whilst leaving the plurality of layers of the data packet intact and undisturbed, the first of said processing nodes determining the routing information contained in the further layer in dependence upon only the data packet content.

8. (Previously Presented) A network according to claim 7, wherein the layers of the data packet further include at least one layer selected from a group containing client device information, user identification information, and application identification information.

9. (Previously Presented). A system for responding to an information request from a client device, the system including wrapping means configured to wrap the information request in at least one layer to produce a request packet; first and second processing nodes; transmitting means configured to transmit the request packet over a distributed network comprising each of said processing nodes; and means configured to generate a response packet for transmission back to the client device via the distributed network for responding to the information request; wherein the first processing node performs analysis of the information request stored on the request packet to determine whether the first processing

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node is able to process the information request and generate at least part of the response packet, and includes means configured to add a further layer to the request packet containing routing information relating to a next stage in processing of the request packet to be performed at the second processing node, the first processing node determining the routing information contained in the routing layer in dependence only upon the request packet content, and the second processing node processing the request packet whilst leaving said at least one layer of the request packet intact and undisturbed; and wherein the means configured to generate the response packet generates the response packet to include said information request.